

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-5 (canceled)

6. (new) A radial roller bearing, comprising:

an outer ring;

an inner ring; and,

cylindrical rollers interposed between the outer ring and the inner ring,

at least one of the outer and inner rings including flange portion formed in the end portion thereof so as to be opposed to the end face of the cylindrical roller,

wherein a contact portion between the end face and the flange portion forms an elliptical shape being narrow in the radial direction and long along the circumferential direction of the flange portion.

7. (new) A radial roller bearing as set forth in Claim 6, wherein the end face of the cylindrical roller is formed in a spherical shape, and a distance ξ is set that $\xi = 0.1D_a$ to $0.4D_a$, where the distance from the center of curvature of the contact portion of the end face to the rotation axis of the cylindrical roller along the radial direction of the cylindrical roller is expressed as ξ and the diameter of the cylindrical roller is expressed as D_a .

PRELIMINARY AMENDMENT
U.S. Appln. No.: Not Yet Assigned
Attorney Docket No.: Q79303

8. (new) A radial roller bearing as set forth in Claim 7, wherein a composite roughness σ is set that $\sigma \leq -10.4 (\xi/Da)^2 + 2.2 (\xi/Da) + 0.9$, where the distance from the center of curvature of the contact portion of the end face to the rotation axis of the cylindrical roller along the radial direction of the cylindrical roller is expressed as ξ , the diameter of the cylindrical roller is expressed as Da and the composite roughness of the contact portion between the contact portion of the end face and the flange portion is expressed as σ .

9. (new) A radial roller bearing as set forth in Claim 7, wherein a radius of curvature η is set that $\eta = 2.0Da$ to $20.0Da$, where the radius of curvature of the contact portion of the end face is expressed as η and the diameter of the cylindrical roller is expressed Da .

10. (new) A radial roller bearing as set forth in Claim 8, wherein a radius of curvature η is set that $\eta = 2.0Da$ to $20.0Da$, where the radius of curvature of the contact portion of the end face is expressed as η .